AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. - 10. (canceled).

11. (new): A method of transmitting data by means of acoustic waves between a transmitter device and a receiver device,

said transmitter device having a first electroacoustic transducer for transmitting an acoustic carrier wave at at least one frequency and means for modulating said acoustic carrier wave as a function of data to be transmitted,

said receiver device having a second electroacoustic transducer for receiving said acoustic carrier wave modulated by the transmitter device and means for demodulating said acoustic carrier wave and extracting the transmitted data therefrom, and

said first and second electroacoustic transducers each having a determined bandwidth and a determined frequency response characteristic,

wherein the frequency of said acoustic carrier wave is varied during a determined time period to sweep a determined range of frequencies situated in the bandwidth common to said first and second electroacoustic transducers so that the frequency of the transmitted acoustic carrier wave does not coincide at any time with a peak or a

trough of the frequency response characteristic of said first or said second electroacoustic transducer.

12. (new): The method according to claim 11, wherein said modulation means of the transmitter device are amplitude modulation means and in that the frequency of said acoustic carrier wave is varied so that the envelope of this acoustic carrier wave remains substantially constant for a given modulation amplitude level.

13. (new): The method according to claim 11, wherein the frequency of said acoustic carrier wave is varied in a substantially linear manner over said determined range of frequencies.

14. (new): The method according to claim 12, wherein the frequency of said acoustic carrier wave is varied in a substantially linear manner over said determined range of frequencies.

15. (new): The method according to claim 11, wherein the frequency of said acoustic carrier wave is varied by means of a frequency modulation technique employing one or more modulating signals.

16. (new) The method according to claim 12, wherein the frequency of said acoustic carrier wave is varied by means of a frequency modulation technique employing one or more modulating signals.

17. (new): The method according to claim 15, wherein the frequency of said acoustic carrier wave is varied by means of a frequency modulation technique

employing two modulating signals and has the shape of the type defined by the following equation:

$$CARRIER(t) = \sin(2\pi \cdot f_0 \cdot t + \Delta 1/f1 \sin(2\pi \cdot f1 \cdot t) + \Delta 2/ f2 \sin(2\pi \cdot f2 \cdot t)) \quad (3)$$

in which CARRIER(t) is the expression for said acoustic carrier wave as a function of time, f0 is the centre frequency of said acoustic carrier wave, f1 and $\Delta 1$ are respectively the frequency and the maximum deviation of the first modulating signal and f2 and $\Delta 2$ are respectively the frequency and the maximum deviation of the second modulating signal.

18. (new): The method according to claim 16, wherein the frequency of said acoustic carrier wave is varied by means of a frequency modulation technique employing two modulating signals and has the shape of the type defined by the following equation:

$$CARRIER(t) = \sin(2\pi \cdot f_0 \cdot t + \Delta 1/f1 \sin(2\pi \cdot f1 \cdot t) + \Delta 2/ f2 \sin(2\pi \cdot f2 \cdot t)) \quad (3)$$

in which CARRIER(t) is the expression for said acoustic carrier wave as a function of time, f0 is the centre frequency of said acoustic carrier wave, f1 and $\Delta 1$ are respectively the frequency and the maximum deviation of the first modulating signal and f2 and $\Delta 2$ are respectively the frequency and the maximum deviation of the second modulating signal.

19. (new): The method according to claim 15, wherein said acoustic carrier wave is an acoustic wave that has a centre frequency of the order of 3000 Hz to 3500 Hz

which is frequency modulated by said modulating signals.

20. (new): The method according to claim 16, wherein said acoustic carrier wave is an acoustic wave that has a centre frequency of the order of 3000 Hz to 3500 Hz which is frequency modulated by said modulating signals.

21. (new): The method according to claim 17, wherein said acoustic carrier wave is an acoustic wave that has a centre frequency of the order of 3000 Hz to 3500 Hz which is frequency modulated by said modulating signals.

22. (new): The method according to claim 18, wherein said acoustic carrier wave is an acoustic wave that has a centre frequency of the order of 3000 Hz to 3500 Hz which is frequency modulated by said modulating signals.

23. (new): The method according to claim 15, wherein the data to be transmitted comprises a succession of bits transmitted by amplitude modulation of said acoustic carrier wave between first and second determined amplitude levels and wherein the parameters of frequency modulation of said acoustic carrier wave are selected so that the frequency spectrum of the acoustic carrier wave resulting from said frequency modulation covers substantially all of the band common to the transmitter and receiver devices.

24. (new): The method according to claim 16, wherein the data to be transmitted comprises a succession of bits transmitted by amplitude modulation of said acoustic carrier wave between first and second determined amplitude levels and wherein the

parameters of frequency modulation of said acoustic carrier wave are selected so that the frequency spectrum of the acoustic carrier wave resulting from said frequency modulation covers substantially all of the band common to the transmitter and receiver devices.

25. (new): The method according to claim 11, wherein said acoustic carrier wave is stored in said transmitter device in the form of a succession of samples stored in a table.

26. (new): A system for transmitting data by means of acoustic waves for implementing the transmission method according to claim 11, wherein this system comprises:

- a data processing terminal associated with at least one acoustic transmitter device having a first electroacoustic transducer for transmitting said acoustic carrier wave, and
- at least a portable device provided with an acoustic receiver device having a second electroacoustic transducer for receiving said acoustic carrier wave.

27. (new): The system for transmitting data according to claim 26, wherein said acoustic carrier wave is stored in said data processing terminal in the form of a succession of samples stored in a table and wherein said data processing terminal comprises software means for:

- consulting said table,

- generating an acoustic carrier wave based on said succession of samples, and

- modulating the acoustic carrier wave as a function of the data to be transmitted.